

PCT09

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/857,308

DATE: 03/13/2002 \$5

TIME: 13:52:58

Input Set : A:\0020-4872P.ST25.txt

Output Set: N:\CRF3\03132002\1857308.raw

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3 <110> APPLICANT: ITOH, Kyogo et al.
      5 <120> TITLE OF INVENTION: NOVEL TUMOR ANTIGEN PROTEIN ART-1 AND TUMOR ANTIGEN PEPTIDES
THEREOF
     7 <130> FILE REFERENCE: 0020-4872P
     9 <140> CURRENT APPLICATION NUMBER: US 09/857,308
C--> 10 <141> CURRENT FILING DATE: 2001-09-18
    12 <150> PRIOR APPLICATION NUMBER: Japan: 98-341253
   13 <151> PRIOR FILING DATE: 1998-12-01
   #15 <160> NUMBER OF SEQ ID NOS: 21
   7 <210> SEQ ID NO: 1
   18 <211> LENGTH: 414
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                                                 155
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	Glu	Glu 290		Glu	Ala	Asp	Leu 295		Ser	Gly	Asp	Gln 300		Leu	Pro	Met	
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812 833 845 857 889 91 92 93 94 95 96 97 98 99 100	<213 <400 acgc cagc ggct gtga tgct tttc Tyr ttc Phe ccc Pro gac Asg	3> OF SECOND SEC	GGANIEQUENT transfer of the control	SM: SCE: SCENCE	2 ccagg gtggt ccagg agg ata Ile 10 cca Pro ccc gag	gc ct ca cc gg ag gt ct aa ct  cca Pro cgg Arg  tca Ser cca Pro	ata Ile gag Glu gcc Ala tgt	tca tca tca tca tca Ser tca Phe aac Asn 45 agt	tca cat tca ser cgt Arg 30 aag Lys ctc	agc Ser Leu ccg Pro acc I Thr	cagg gatt ctga gaca cag Gln yal aag Lys	ggcg ggct ccga atg Met acc Thr gaa Glu ccc Pro	gectored according to the control of	ctc of gcg of aga a ctg Leu aga Arg cat His act Thr	ccgt ccggc ctgtt atgcc caa Gln agt Ser 20 gac Asp atg Met cag cag	ccttcc eggacc ccttcg ctggca aga Arg 5 tcc Ser cca Pro ctg Leu	120 180 240 300 355 403 451

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109																	001
110	ЦСи	110	JCI	105	110	GLY	UCI	110	110	пса	110	нэр	изр	115	пси	110	
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112																	, 55
113	<u> </u>	пор	120	دير	UDII	110	AD!!	125	110	LIIC	GIII	110	130	III	JCI	пър	
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,	200		<b>a</b> aa	+ ~ ~	+~+	~~~		a+ a	a+ a	+	<b>~~</b>		~+ ~	~~~	202	2+4	835
						cgg					_	_		-			633
		пр	птъ	ser	Cys	Arg 155	GIII	ьец	ьeu	тут		Ата	Val	Ата	TILL	165	
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 204 Ser Phe Asp Leu Leu Pro Arg Glu Phe
 205
 207 <210> SEQ ID NO: 7
 208 <211> LENGTH: 11
 209 <212> TYPE: PRT
 210 <213> ORGANISM: Homo sapiens
```

DATE: 03/13/2002

```
PATENT APPLICATION: US/09/857,308
                                                          TIME: 13:52:58
                 Input Set : A:\0020-4872P.ST25.txt
                 Output Set: N:\CRF3\03132002\1857308.raw
 212 <400> SEQUENCE: 7
 213 Ser Phe Asp Leu Leu Pro Arg Glu Phe Arg Leu
 214
 216 <210> SEQ ID NO: 8
 217 <211> LENGTH: 9
 218 <212> TYPE: PRT
 219 <213> ORGANISM: Homo sapiens
 221 <400> SEQUENCE: 8
222 Leu Tyr Gln Ala Val Ala Thr Ile Leu
.223
 225 <210> SEQ ID NO: 9
 226 <211> LENGTH: 10
 227 <212> TYPE: PRT
 228 <213> ORGANISM: Homo sapiens
 230 <400> SEQUENCE: 9
 231 Glu Tyr Cys Leu Lys Phe Thr Lys Leu Leu
 232
234 <210> SEQ ID NO: 10
235 <211> LENGTH: 10
 236 <212> TYPE: PRT
237 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 10
📆 40 Arg Phe Ala Val Asp Met Glu Gln Val Phe
                     . 2
243 <210> SEQ ID NO: 11
244 <211> LENGTH: 10
245 <212> TYPE: PRT
246 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 11
 249 Pro Phe Pro Asp Val Met Glu Gln Val Phe
□<sub>250</sub>
                       5
252 <210> SEQ ID NO: 12
253 <211> LENGTH: 11
254 <212> TYPE: PRT
 255 <213> ORGANISM: Homo sapiens
 257 <400> SEQUENCE: 12
 258 Val Phe His Glu Val Gly Ile Gly Ser Val Leu
 259
                       5
 261 <210> SEQ ID NO: 13
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RAW SEQUENCE LISTING



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

262 <211> LENGTH: 9 263 <212> TYPE: PRT

268

266 <400> SEQUENCE: 13

270 <210> SEQ ID NO: 14 271 <211> LENGTH: 10 272 <212> TYPE: PRT

264 <213> ORGANISM: Homo sapiens

273 <213> ORGANISM: Homo sapiens

267 Asp Tyr His Ser Tyr Met Leu Gln Ile

VERIFICATION SUMMARY DATE: 03/13/2002 PATENT APPLICATION: US/09/857,308 TIME: 13:52:59

Input Set : A:\0020-4872P.ST25.txt
Output Set: N:\CRF3\03132002\1857308.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21